

IN THE CLAIMS:

Please cancel originally filed claims 1-15 and insert new claims 16 - 60 as follows. A complete listing of all the claims is as follows:

Claims 1 to 15. (Cancelled).

Please add new Claims 16 to 28 based upon Parent U.S. Patent Application Serial No. 09/890,083.

Claim 16. (New).

A system for conveying filled bags by an upper edge region of said bags, said conveyor comprising:

a support frame;

first and second belt assemblies mounted to said frame each having a distal end for receiving said bags and a proximal end for discharging said bags, said assemblies each having journalled therein continuous belt means;

first drive means for rotatably driving at least one of said belt means;

at least one of said belt assemblies being pivotally mounted to said frame at a pivot point adjacent a proximal end of said at least one assembly for rotation about a vertical axis,

for bringing said belt means into parallel contact with each other in a closed position; and

second drive means for pivoting said at least one assembly relative to the other of said assemblies about said pivot point for sequentially separating said assemblies at their distal ends to receive a bag and subsequently converging to grip said bag between said belt means by the upper edge region of said bag, for subsequent conveying of said bag by said first drive means towards said proximal end.

Claim 17. (New) .

A system as defined in claim 16, wherein only one of said assemblies is pivotally mounted for converging and diverging relative to the other of said assemblies.

Claim 18. (New) .

A system as defined in claim 16, wherein said first drive means are for directly driving both of said continuous belt means.

Claim 19. (New) .

A system as defined in claim 16, further comprising a heat sealer mounted on or adjacent to said support frame, said heat sealer comprising a pair of parallel heated continuous belt means for receiving said upper edge region of said bag and heat

sealing said bag while conveying said bag along said heat sealer, said heat sealer being positioned to directly receive said bags from said proximal end of said conveyor.

Claim 20. (New).

A system as defined in claim 16, wherein said belt assemblies each include a housing having journalled therein at either end a rotatable pulley for supporting said continuous belt means under tension between said pulleys.

Claim 21. (New).

A method for conveying bags by an upper edge region of each of said bags, comprising the steps of:

providing a conveyor having a support frame and first and second continuous belt means each separately mounted within an assembly, said assemblies each having a distal end for receiving said bags and a proximal end for discharging said bags, at least one of said assemblies being pivotally mounted to said frame at a pivot point for pivotal movement about a vertical axis relative to the other of said assemblies, and drive means for driving at least one of said continuous belt means;

pivoting said at least one assembly about said pivot point whereby the distal ends of said assemblies diverge;

positioning a bag between said assemblies at said distal end;

pivoting said at least one assembly about said pivot point whereby said assemblies converge to a position wherein said first and second belt means are in contact and parallel to each other, thereby gripping said bag between said belt means;

driving at least one of said belt means thereby conveying said bag towards said proximal end of said conveyor;

discharging said bag from said proximal end;

pivoting said at least one assembly about said pivot point to diverge the distal ends thereof to receive a subsequent bag.

Claim 22. (New).

A method as defined in claim 21, wherein both of said belt means are directly driven by said drive means.

Claim 23. (New).

A method as defined in claim 21, comprising the further step of discharging said bag into a heat sealer comprising a pair of heated moving bands for gripping and conveying a bag between said bands, and heat-sealing said bag while conveying said bag along said heat sealer.

Claim 24. (New).

In a system for filling bags with a loose commodity, said system comprising a dispensing means for dispensing said

commodity into said bags, the improvement comprising a conveyor for gripping filled bags by an upper edge region of said bags, said conveyor comprising:

a support frame;

first and second belt assemblies mounted to said frame each having a distal end for receiving said bags and a proximal end for discharging said bags, said assemblies each having journaled therein continuous belt means;

first drive means for rotatably driving at least one of said belt means;

at least one of said belt assemblies being pivotally mounted to said frame at a pivot point adjacent a proximal end of said at least one assembly for rotation about a vertical axis, for bringing said belt means into parallel contact with each other in a closed position; and

second drive means for pivoting said at least one assembly relative to the other of said assemblies about said pivot point for sequentially separating said assemblies at their distal ends to receive a bag and subsequently converging to grip said bag between said belt means by the upper edge region of said bag, for subsequent conveying of said bag by said first drive means towards said proximal end.

Claim 25. (New) .

A system as defined in claim 24, wherein only one of said assemblies is pivotally mounted for converging and diverging relative to the other of said assemblies.

Claim 26. (New) .

A system as defined in claim 24, wherein said first drive means are for directly driving both of said continuous belt means.

Claim 27. (New) .

A system as defined in claim 24, further comprising a heat sealer mounted on or adjacent to said support frame, said heat sealer comprising a pair of parallel heated continuous belt means for receiving said upper edge region of said bag and heat-sealing said bag while conveying said bag along said heat sealer, said heat sealer being positioned to directly receive said bags from said proximal end of said conveyor.

Claim 28. (New) .

A system as defined in claim 24, wherein said belt assemblies each include a housing having journalled therein at either end a rotatable pulley for supporting said continuous belt means under tension between said pulleys.

Please add new Claims 29 - 60 which are copied from the Gates et al U.S. Patent No. 6,550,226, issued April 22, 2003, and which correspond to Gates et al claims 1 to 32, respectively.

Claim 29. (New) .

A method for filling and sealing a bag with a material, the method comprising the steps of:

- (a) providing an empty collapsed bag on a bag holder;
- (b) removing the bag from the bag holder with a funnel assembly;
- (c) opening the bag with the funnel assembly;
- (d) filling the bag with material through the funnel assembly;
- (e) grasping the opposed top edges of the bag with a pair of grabber arms;
- (f) pulling the grasped top edges of the bag apart;
- (g) delivering the bag to a sealing apparatus; and
- (h) sealing the bag,

Claim 30. (New) .

The method of claim 29, wherein step (b) includes the step of placing the funnel assembly in the opening of the bag and tilting the funnel assembly away from the bag holder to remove the bag from the bag holder.

Claim 31. (New) .

The method of claim 30, further comprising the step of blowing air into the opening of the bag before the funnel assembly is inserted into the opening.

Claim 32. (New) .

The method of claim 29, wherein step (c) includes the step of providing the funnel assembly with first and second halves and moving the first and second halves apart from each other after the funnel is inserted into the opening of the bag.

Claim 33. (New) .

The method of claim 29, wherein step (c) further includes the step of blowing a fluid into the bag to fully open the bag.

Claim 34. (New) .

The method of claim 33, further comprising the step of providing the bag with gussets and opening the gussets when the fluid is blown into the bag.

Claim 35. (New) .

The method of claim 29, wherein step (e) includes the steps of providing a pair of finger assemblies and moving the finger assemblies up, over, and down over the top edges of the

bag.

Claim 36. (New).

The method of claim 35, further comprising the step of moving the finger assemblies away from each other to close the opening of the bag.

Claim 37. (New).

The method of claim 36, further comprising the step of moving the bag toward the sealing apparatus while the finger assemblies are moving away from each other.

Claim 38. (New).

The method of claim 37, further comprising the step of providing a fluid line connected to at least one of the finger assemblies.

Claim 39. (New).

The method of claim 29, wherein step (c) occurs before step (b).

Claim 40. (New).

The method for filling and sealing a bag with a material, the method comprising the steps of:

- (a) providing an empty collapsed bag on a bag holder;

- (b) removing the bag from the bag holder with a funnel assembly;
- (c) opening the bag with the funnel assembly;
- (d) filling the bag with material through the funnel assembly;
- (e) delivering the bag to a sealing apparatus; and sealing the bag.

Claim 41. (New) .

The method of claim 40, wherein step (b) includes the step of placing the funnel assembly in the opening of the bag and tilting the funnel assembly away from the bag holder to remove the bag from the bag holder.

Claim 42. (New) .

The method of claim 41, further comprising the step of blowing air into the opening of the bag before the funnel assembly is inserted into the opening.

Claim 43. (New) .

The method of claim 40, wherein step (c) includes the step of providing the funnel assembly with first and second halves and moving the first and second halves apart from each other after the funnel is inserted into the opening of the bag.

Claim 44. (New) .

The method of claim 40, wherein step (c) further includes the step of blowing a fluid into the bag to fully open the bag.

Claim 45. (New) .

The method of claim 44, further comprising the step of providing the bag with gussets and opening the gussets when the fluid is blown into the bag.

Claim 46. (New) .

The method of claim 40, wherein steps (a) and (b) include the steps of providing a bag holder having a body rod connected to a frame member and pulling the bag from the rod without pinching the bag between the rod and the frame member.

Claim 47. (New) .

The method of claim 40, wherein step (c) occurs before step (b) .

Claim 48. (New) .

A method of filling a bag with a material and sealing a bag; the method comprising the steps of:

- (a) providing an empty collapsed bag on a bag holder;
- (b) opening the bag;

(c) filling the bag with material;  
(d) grasping the opposed top edges of the bag with a pair of grabber arms;  
(e) pulling the grasped top edges of the bag apart;  
(f) delivering the bag to a sealing apparatus; and  
(g) sealing the bag,  
wherein step (f) includes the steps of providing a pair of finger assemblies and moving the finger assemblies up, over, and down over the top edges of the bag.

Claim 49. (New) .

The method of claim 48, further comprising the step of moving finger assemblies away from each other to close the opening of the bag.

Claim 50. (New) .

The method of claim 48, further comprising the step of moving the bag toward the sealing apparatus while the finger assemblies are moving away from each other.

Claim 51. (New) .

The method of claim 48, wherein step (e) is being conducted while step (f) is being conducted.

Claim 52. (New) .

A method for filling and sealing a bag with a material, the method comprising the steps of:

- (a) providing an empty collapsed bag on a bag holder;
- (b) removing the bag from the bag holder with a funnel assembly;
- (c) filling the bag with material through the funnel assembly; and
- (d) sealing the bag.

Claim 53. (New) .

The method of claim 52, wherein step (b) includes the step of placing the funnel assembly in the opening of the bag and moving the funnel assembly away from the bag holder to remove the bag from the bag holder.

Claim 54. (New) .

The method of claim 53, further comprising the step of tilting the funnel assembly away from the bag holder.

Claim 55. (New) .

The method of claim 52, further comprising the step of opening the bag with the funnel assembly.

Claim 56. (New) .

The method of claim 55, further comprising the steps of providing the funnel assembly with first and second halves and moving the first and second halves apart from each other to open the bag with the funnel assembly.

Claim 57. (New) .

The method of claim 52, wherein step (a) and (b) include the steps of providing a bag holder having a body rod connected to a frame member and pulling the bag from the rod without pinching the bag between the rod and the frame member.

Claim 58. (New) .

A method of filling a bag with a material and sealing a bag; the method comprising the steps of:

- (a) providing an empty collapsed bag on a bag holder;
- (b) filling the bag with material;
- (c) grasping the opposed top edges of the bag with a pair of finger assemblies that move inwardly and down to grasp the top edges of the bag, the motion being with respect to the bag;
- (d) delivering the bag to a sealing apparatus; and
- (e) sealing the bag.

Claim 59. (New) .

The method of claim 58, further comprising the step of moving finger assemblies away from each other to close the opening of the bag.

Claim 60. (New) .

The method of claim 58, further comprising the step of moving the bag toward the sealing apparatus while the finger assemblies are moving away from each other.